

Claims

What is claimed is:

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- 1 1. An expandable tubular assembly, comprising:
2 a pair of tubular members having threaded portions coupled to one
3 another; and
4 a quantity of a sealant within the threaded portions of the tubular
5 members.
 - 1 2. The assembly of claim 1, wherein the sealant is selected from the group
2 consisting of epoxies, thermosetting sealing compounds, curable sealing
3 compounds, and sealing compounds having polymerizable materials.
 - 1 3. The assembly of claim 1, wherein the sealant includes an initial cure cycle
2 and a final cure cycle.
 - 1 4. The assembly of claim 1, wherein the sealant can be stretched up to about
2 30 to 40 percent without failure.
 - 1 5. The assembly of claim 1, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.
 - 1 6. The assembly of claim 1, wherein the material properties of the sealant are
2 substantially stable for temperatures ranging from about 0 to 450 °F.
 - 1 7. The assembly of claim 1, wherein the threaded portions of the tubular
2 members include a primer for improving the adhesion of the sealant to the
3 threaded portions.

1 8. A method of coupling an expandable tubular assembly including a plurality
2 of tubular members having threaded portions to a preexisting structure,
3 comprising:

4 coating the threaded portions of the tubular members with a sealant;
5 coupling the threaded portions of the tubular members;
6 curing the sealant;
7 positioning the tubular members within a preexisting structure; and
8 radially expanding the tubular members into contact with the preexisting
9 structure.

1 9. The method of claim 8, wherein the sealant is selected from the group
2 consisting of epoxies, thermosetting sealing compounds, curable sealing
3 compounds, and sealing compounds having polymerizable materials.

1 10. The method of claim 8, further including:
2 initially curing the sealant prior to radially expanding the tubular
3 members; and
finally curing the sealant after radially expanding the tubular members.

1 11. The method of claim 8, wherein the sealant can be stretched up to about 30
2 to 40 percent after curing without failure.

1 12. The method of claim 8, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.

1 13. The method of claim 8, wherein the material properties of the sealant are
2 substantially stable for temperatures ranging from about 0 to 450 °F.

1 14. The method of claim 8, further including:
2 applying a primer to the threaded portions of the tubular members prior to
3 coating the threaded portions of the tubular members with the
4 sealant.

1 15. The method of claim 14, wherein the primer includes a curing catalyst.

1 16. The method of claim 14, wherein the primer is applied to the threaded
2 portion of one of the tubular members and the sealant is applied to the threaded
3 portion of the other one of the tubular members.

1 17. The method of claim 16, wherein the primer includes a curing catalyst.

1 18. An apparatus, comprising:
2 a preexisting structure; and
3 a plurality of tubular members having threaded portions coupled to the
4 preexisting structure by the process of:
5 coating the threaded portions of the tubular members with a
6 sealant;
7 coupling the threaded portions of the tubular members;
8 curing the sealant;
9 positioning the tubular members within a preexisting structure; and
10 radially expanding the tubular members into contact with the
11 preexisting structure.

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12 19. The apparatus of claim 18, wherein the sealant is selected from the group
13 consisting of epoxies, thermosetting sealing compounds, curable sealing
14 compounds, and sealing compounds having polymerizable materials.

1 20. The apparatus of claim 18, further including:
2 initially curing the sealant prior to radially expanding the tubular
3 members; and
4 finally curing the sealant after radially expanding the tubular members.

1 21. The apparatus of claim 18, wherein the sealant can be stretched up to
2 about 30 to 40 percent after curing without failure.

1 22. The apparatus of claim 18, wherein the sealant is resistant to conventional
2 wellbore fluidic materials.

1 23. The apparatus of claim 18, wherein the material properties of the sealant
2 are substantially stable for temperatures ranging from about 0 to 450 °F.

1 24. The apparatus of claim 18, further including:
2 applying a primer to the threaded portions of the tubular members prior to
3 coating the threaded portions of the tubular members with the
4 sealant.

1 25. The apparatus of claim 24, wherein the primer includes a curing catalyst.

1 26. The apparatus of claim 24, wherein the primer is applied to the threaded
2 portion of one of the tubular members and the sealant is applied to the threaded
3 portion of the other one of the tubular members.

- 1 27. The apparatus of claim 26, wherein the primer includes a curing catalyst.

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